	Application No.	Applicant(s)
Notice of Allowability	10/068,497	CRAGUN ET AL.
	Examiner	**Art Unit**	
	Jonathan G. Sterrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *3-28-07*.

2. ☒ The allowed claim(s) is/are *6-20 and 40*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

           International Bureau (PCT Rule 17.2(a)).

     * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

     (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

     (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

Allowance

1.   **Claims 6-20 and 40** are pending and allowed in the application. **Claims 1-5 and 21-39** have been cancelled. Please see the examiner's amendment and reasons for allowance below.

Examiner's Amendment

2.   An examiner's amendment to the record is attached to the Office Action. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Joan Pennington Reg. 30,885 on 1 June 2007. See attached interview summary.

3.   The following claims represent the claims pending in the application.

6. (previously presented)   A meeting scheduler for automated meeting rescheduling for busy calendars as recited in claim 10 wherein said electronic calendar meeting scheduling program stores meeting attendee automation properties defined for each attendee of each said scheduled meeting; and wherein said electronic calendar meeting scheduling program utilizes said stored meeting automation properties and said

stored meeting attendee automation properties to identify said solution time block for

automated meeting rescheduling.

7. (currently amended)   A meeting scheduler for automated meeting

rescheduling for busy calendars as recited in claim 10 wherein said electronic calendar

meeting scheduling program ~~utilizes said stored meeting automation properties to~~

~~calculate said conflict score and an action list for each potential time block for~~

~~automated meeting rescheduling; and wherein said electronic calendar meeting~~

~~scheduling program utilizes said calculated conflict score and said action list to identify~~

~~said solution time block for automated meeting rescheduling~~ identifies an unavailability

event; and for each conflicting meeting for said identified unavailability event,

decommits from each said conflicting meeting.

8. (currently amended)   A meeting scheduler for automated meeting

rescheduling for busy calendars as recited in claim 15 wherein said calculated conflict

score includes a ~~said~~ calculated move score for each meeting altered for automated

meeting rescheduling.

9. (currently amended)   A meeting scheduler for automated meeting

rescheduling for busy calendars as recited in claim 8 wherein said calculated move

score includes at least one of ~~a stored move premium meeting automation property~~

~~value,~~ an increased move score based upon each optional meeting attendee, an

increased move score based upon each required meeting attendee, and an increased

move score based upon each required approval by a meeting attendee.

    10. (currently amended) A meeting scheduler, running on a computer, for

automated meeting insertion rescheduling for busy calendars comprising:

    an electronic calendar meeting scheduling program storing meeting automation

properties defined for each scheduled meeting; and

    said electronic calendar meeting scheduling program utilizing said stored

meeting automation properties to calculate a conflict score, said conflict score used to

identify a solution time block for the automated meeting rescheduling;

    said calculated conflict score includes a calculated move score for each meeting

altered for automated meeting insertion and rescheduling;

    said calculated move score comprises: includes at least one of an increased

move score based upon each time meeting has been moved, an increased move score

based upon each day delay for alternate meeting time block, a decreased move score

based upon each attendee with same conflict, and a decreased move score based upon

each day for alternate meeting time block from a current date;

    wherein the calculated conflict score results in a minimum total score utilizing the

move scores; and

    storing said identified solution time block for the automated meeting

rescheduling.

11. (previously presented) A meeting scheduler for automated meeting rescheduling for busy calendars as recited in claim 10 wherein said calculated move score includes a maximum value based upon an alternate meeting time block beyond a meeting deadline value.

12. (previously presented) A meeting scheduler for automated meeting rescheduling for busy calendars as recited in claim 15 wherein said calculated conflict score includes a calculated leave early score for each meeting altered for automated meeting rescheduling.

13. (previously presented) A meeting scheduler for automated meeting rescheduling for busy calendars as recited in claim 12 wherein said calculated leave early score includes at least one of a stored leave early premium meeting automation property value, an increased leave early score based upon number of minutes for leaving early, and an increased leave early score based upon each required approval by a meeting attendee.

14. (previously presented) A meeting scheduler for automated meeting rescheduling for busy calendars as recited in claim 12 wherein said calculated leave early score includes an increased leave early score based upon each leaving participant's meeting role.

15. (currently amended) A computer executed software program meeting

scheduler for automated meeting rescheduling for busy calendars comprising:

an electronic calendar meeting scheduling program storing meeting automation

properties and meeting attendee automation properties defined for each scheduled

meeting;

said stored meeting automation properties including a move premium value, a

shorten premium value, a leave premium value, and a plurality of approval options for

moving, shortening and for allowing attendees to leave early;

said meeting attendee automation properties including an attendee role, an attendee

commitment option for attending; an attendee selected notification option, and a

plurality of approval options for moving, shortening and for allowing attendees to

leave early;

said electronic calendar meeting scheduling program utilizing said stored meeting

and attendee automation properties to identify a solution time block for the

automated meeting rescheduling;

said electronic calendar meeting scheduling program utilizing said stored

meeting automation and attendee properties to calculate a conflict score and action list

for each potential time block for the automated meeting rescheduling; wherein said

conflict score is calculated using the smallest increment associated with said meeting

automation properties and said meeting attendee automation properties to result in a

minimum calculated conflict score; said calculated conflict score includes a calculated

~~shorten meeting score for each meeting altered for automated meeting rescheduling;~~ and

said electronic calendar meeting scheduling program utilizing said calculated conflict score and action list to identify said solution time block for the automated meeting rescheduling; and

said electronic calendar meeting scheduling program storing said identified solution time block for the automated meeting rescheduling.

16. (currently amended)   A meeting scheduler for automated meeting rescheduling for busy calendars as recited in claim 15 ~~wherein said~~ includes a calculated shorten meeting score ~~includes~~ including at least one of a stored shorten meeting range premium meeting automation property value, an increased shorten meeting score based upon number of minutes to shorten meeting, and an increased shorten meeting score based upon each required approval by a meeting attendee.

17. (currently amended)   A meeting scheduler for automated meeting rescheduling for busy calendars as recited in claim 15 ~~wherein said~~ includes a calculated shorten meeting score ~~includes~~ including at least one of a decreased shorten meeting score based upon each day for alternate meeting time block from a current date, and a decreased shorten meeting score based upon previous or next periodic meeting not being shortened and a decreased shorten meeting score based upon each day for an alternate meeting time block from next periodic meeting.

18. (previously presented) A meeting scheduler for automated meeting rescheduling for busy calendars as recited in claim 15 wherein said calculated conflict score includes for each meeting altered for automated meeting rescheduling at least one of a calculated move score, a calculated leave early score and a calculated shorten meeting score.

19. (previously presented) A meeting scheduler for automated meeting rescheduling for busy calendars as recited in claim 18 wherein a lowest one of said at least one of said calculated move score, said calculated leave early score, and said calculated shorten meeting score is added to said conflict score.

20. (previously presented) A meeting scheduler for automated meeting rescheduling for busy calendars as recited in claim 18 wherein a lowest score action of said calculated move score, said calculated leave early score, and said calculated shorten meeting score is added to said action list.

Claims 21-39 (canceled)

40. (currently amended) A computer program product for automated meeting insertion and rescheduling for busy calendars, said computer program product including a plurality of computer executable instructions stored on a computer readable medium,

wherein said instructions, when executed by a computer, cause the computer to perform the steps of:

storing meeting automation properties defined for each scheduled meeting; said stored meeting automation properties including a move premium value, a shorten premium value, a leave premium value, and a plurality of approval options for moving, shortening and for allowing attendees to leave early;

storing meeting attendee automation properties defined for each attendee of each said scheduled meeting; said meeting attendee automation properties including an attendee role, an attendee commitment option for attending; an attendee selected notification option, and a plurality of approval options for moving, shortening and for allowing attendees to leave early;

calculating a conflict score and action list for each potential time block for the automated meeting insertion and rescheduling utilizing said stored meeting automation properties and said stored meeting attendee automation properties; wherein said conflict score is calculated using the smallest increment associated with said meeting automation properties and said meeting attendee automation properties to result in a minimum calculated conflict score; said action list including an entry for each meeting altered for automated meeting insertion and rescheduling; and

identifying a solution time block for the automated meeting insertion and rescheduling utilizing said calculated conflict score and action list of said potential time blocks; and storing said identified solution time block for the automated meeting rescheduling.

Allowable Subject Matter

5.   **Claims 6-20 and 40** are allowed.

Reasons for Allowance

6.   The following is a statement of reasons for the indication of allowable subject

matter:

While pieces of prior art each teach many of the features of the claimed

invention, there is no motivation found within the art to combine these teachings to

result in the claimed subject matter and, even if one was to combine the references, the

combination would not expressly result in the claimed subject matter.

The prior art reference most closely resembling the Applicant's claimed invention

is Lin, C K Y; "Microcomputer-based workforce scheduling for hospital porters", 1999,

Journal of Management in Medicine, v13n4, pp.251, Dialog 02405180 116360139,

(hereinafter **Lin**).

As for independent **Claims 10, 15 and 40,** none of the prior art of record, taken

individually or in any combination, teach, inter alia,

Storing meeting automation properties for rescheduling a meeting; where the

meeting automation properties contain a variety of scored options for moving the

meeting to a different time;

where the conflict scores are calculated from the meeting properties using all of the following: an increased move score based upon each time meeting has been moved, an increased move score based upon each day delay for alternate meeting time block, a decreased move score based upon each attendee with same conflict, and a decreased move score based upon each day for alternate meeting time block from a current date, as per Claim 10;

where the conflict scores are calculated from the meeting properties using all of the following: a move premium value, a shorten premium value, a leave premium value, and a plurality of approval options for moving, shortening and for allowing attendees to leave early; an attendee role, an attendee commitment option for attending; an attendee selected notification option, and a plurality of approval options for moving, shortening and for allowing attendees to leave early, as per Claims 15 and 40;

calculating for the meeting automation properties a conflict score for each property for all the attendees, such that the overall conflict score is minimized for moving the meeting to a different time slot.

Lin teaches a mixed integer programming approach that uses a heuristic approach to scheduling. While Lin handles rescheduling based on changes to the schedule, Lin's approach deals explicitly with a greater number of hard constraints. This is different from the instant application which provides for an increase in a conflict score discouraging rescheduling in a particular time slot, where Lin might or might not

reschedule there, based on a hard constraint. Lin takes into account preferences along one dimension in rescheduling (where workers are sorted or prioritized according to an equity measure as an input). The instant application takes into account a variety of measures and reschedules the meeting in a different direction based on minimizing the conflict score. Yet a further difference between Lin and the instant application is that Lin is rescheduling an entire schedule of employees for their work shifts, this large of a problem set requires the type of hard constraint since many time slots are being scheduled at the same time. The instant application is approaching the scheduling of one meeting with many attendees (and their various other conflicts and preferences for leaving early, for example). The type of problem the instant application is solving is different and allows for flexibility in handling constraints since only one time slot is being considered at a time for rescheduling.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JP 06028361 A by Griffin discloses a scheduling method that uses parameters
and time blocks.

8.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-
272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Tariq Hafiz can be reached on 571-272-6729.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
published applications may be obtained from either Private PAIR or Public PAIR.
Status information for unpublished applications is available through Private PAIR only.
For more information about the PAIR system, see http://pair-direct.uspto.gov. Should
you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

JGS

6-2-2007

C. MICHELLE TARAE
PRIMARY EXAMINER